Weekly Report

2015 Week 52 (December 27 - January 02, 2016) through 2016 Week 52 (December 25 - December 31)

Department of Health and Human Services
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Data for the graphs and tables on the following pages are provisional and may be updated as additional information becomes available.

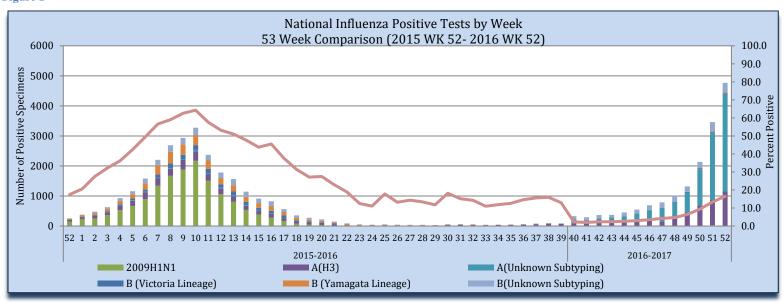
Purpose

The purpose of this report is to provide an overview of and statistics for the influenza season in Nevada for the local public health authorities, sentinel providers and the public.

Sentinel Provider Data: Influenza-Like Illness Network Surveillance (ILINet)

Respiratory specimens are tested for influenza by the World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NRVESS) collaborating laboratories by sub-type. During week 52, there were 28,886 specimens collected and tested for influenza, of those 4,764 were positive (16.5%).

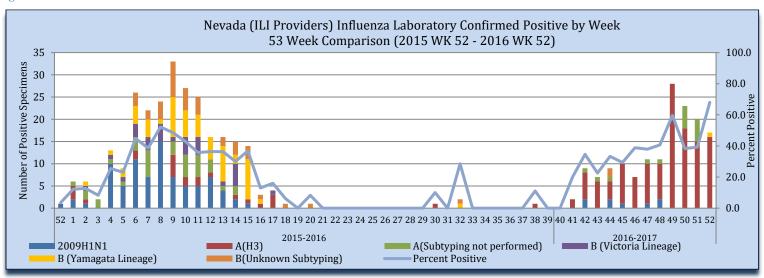
Figure 1



Source of Data: CDC: FluView Weekly Report.

The Nevada total includes laboratory tests for all Nevada residents tested by sentinel providers including out of state laboratories. During week 52, there were 25 specimens collected and 17 were positive (68.0%). There is a two week delay for laboratory surveillance.

Figure 2



Source of Data: CDC: ILINet.

Nevada State Public Health Laboratory (NSPHL) has tested 157 specimens for influenza from sentinel providers, of which there have been 131 positive (83.4%). Southern Nevada Public Health Laboratory (SNPHL) has tested 68 specimens this season of which there have been 2 positives. Nationally, there have been 253,242 specimens sent to the WHO and NERVSS laboratories of which 16,534 have been positive (6.5%). The national numbers in Table 1 are reflected in Figure 1. The state of Nevada data in Table 1 is reflected in Figure 2. The Nevada total includes laboratory test for all Nevada residents tested by sentinel providers, including out of state laboratories.

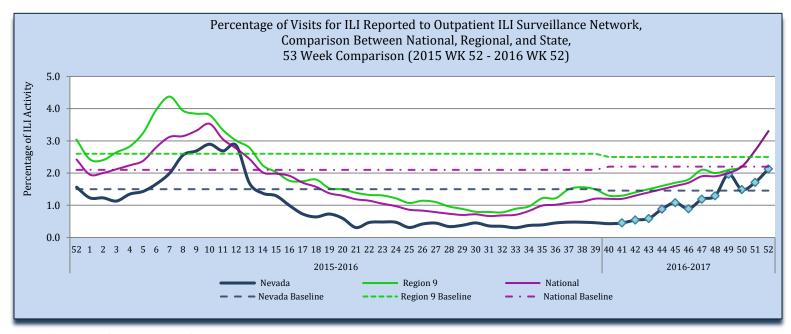
Table 1

	Influenza Specimens Tested State and Nationally through Sentinel Providers										
	NSPHL	SNPHL	All Other Labs. (NRVESS of NV Residents)	State of Nevada (Week 52)		State of Nevada (Season)		National (Week 52)		National (Season)	
				#	%	#	%	#	%	#	%
Specimens Tested	157	38	198	25		393		28,886		253,242	
Influenza Positives	131	2	21	17	68.0	154	39.2	4,764	16.5	16,534	6.5
Influenza A:	130	2	19	16	94.1	151	98.1	4,385	92.0	14,109	85.3
A (2009 H1N1)	7	0	1	0	0	8	5.3	19	0.4	156	1.1
A (H3)	123	2	3	16	100	128	84.4	1,130	25.8	4,428	31.4
A (Sub-typing not performed)	0	0	15	0	0.0	15	9.9	3,236	73.8	9,525	67.5
<u>Influenza B:</u>	1	0	2	1	5.9	3	1.9	379	8.0	2,425	14.7
B (Victoria Lineage)	0	0	0	0	0.0	0	0.0	33	8.7	162	6.7
B (Yamagata Lineage)	1	0	0	1	100	1	33.3	27	7.1	102	4.5
B (Sub-typing not performed)	0	0	2	0	0	2	66.7	319	84.2	2,155	88.9

Source of Data: CDC: FluView Report and CDC: ILINet.

Influenza-like Illness (ILI) Surveillance Network has each sentinel provider report the number of patients seen that meet the ILI case definition and the total number of patients seen for any reason each week. The "percentage of visits for ILI" is the number of ILI patients divided by the total number of patients visit per week. Nevada's percentage of ILI visits for week 52 is 2.1% which is above the state baseline of 1.5%. Region 9 ILI percentage for week 52 is 3.3% which is above the region baseline 2.5%. Region 9 includes the following states/territory: Arizona, California, Guam, Hawaii, and Nevada. The national ILI percentage for week 52 is 3.3% which is above the national baseline 2.2%.

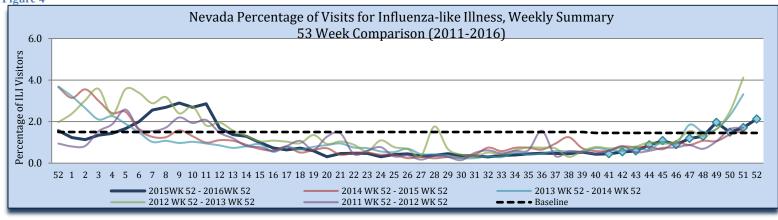
Figure 3



Source of Data: CDC: Flu View Report and CDC: ILINet.

During week 52, 2.1% of visits to sentinel providers were due to ILI; this is higher than the 2015-2016 influenza season (1.6%). There were 18,359 patients seen by sentinel providers during week 52, of which 390 patients presented with ILI; week 52 of 2015, there were 245 patients seen with ILI (15,671 total patients seen).

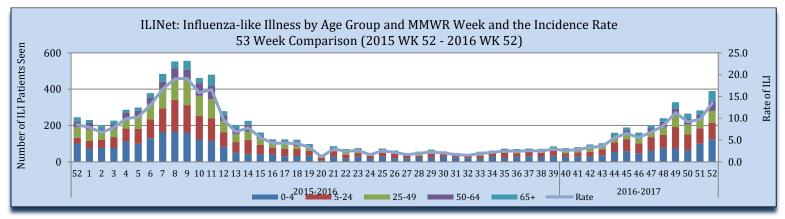
Figure 4



Source of Data: CDC: ILINet.

Influenza-like Illness is reported by age groups. During week 52, patients age 0-4 were the greatest number of patients seen with ILI, at 152 patients seen. The rate for week 52 is 13.4 per 100,000 population. The rate is calculated by the number of patients presented with ILI, divided by the state population, multiplied by 100,000. The estimated state population for 2016 is 2,902,853.

Figure 5



Source of Data: CDC: ILINet.

Influenza Positive Surveillance (NBS and NETSS)

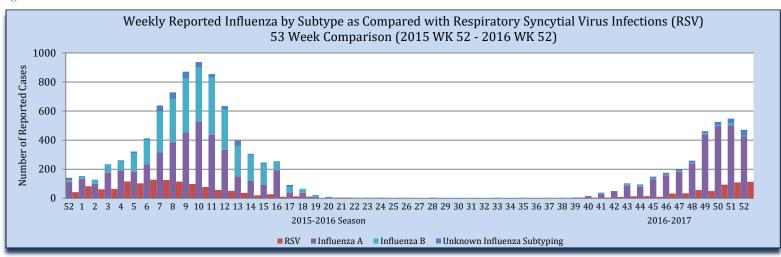
Positive cases of influenza are reported to the state health authority for surveillance purposes. Table 2 and Figure 6 reflect all positive influenza cases reported to the state. Types of influenza testing include commercial rapid diagnostic test (rapid), viral culture, fluorescent antibody, enzyme immunoassay, RT-PCR (PCR), and Immunohistochemistry. The two most common test types in Nevada are Rapid and PCR tests. During week 52, there were 472 influenza cases reported to the state, 425 influenza A, 7 influenza B and 40 unknown subtyping.

Table 2

	Reported Influenza Cases by County Jurisdiction and Influenza Type									
Reporting Jurisdiction	Current Week (Week 52)				Cumulative Influenza Season					
	A	В	Unknown	Total	A	В	Unknown	Total		
Carson City Health and Human Services	80	0	0	80	472	0	2	474		
Rural Community Health Services	26	0	0	26	269	12	12	293		
Southern Nevada Health District	146	6	31	183	765	48	69	882		
Washoe County Health District	173	1	9	183	1332	25	92	1,449		
State of Nevada	425	7	40	472	2,838	85	175	3,098		

Source: OPHIE: NBS and SNHD: NETSS.

Figure 6



Source of Data: OPHIE: NBS and SNHD: NETSS.

Hospitalizations

There were 48 hospitalization associated with influenza reported to the state health authority for week 52.

Table 3

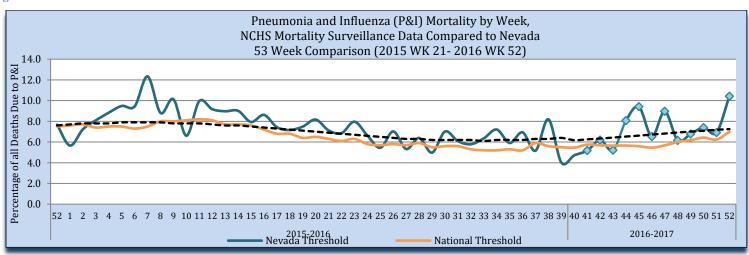
Influenza Hospitalizations								
Donouting Invigdiction	Current Weel	k (Week 52)	Cumulative Influenza Season					
Reporting Jurisdiction	#	%	#	%				
Carson City Health and Human Services	2	4.2	5	1.9				
Rural Community Health Services	1	2.1	4	1.5				
Southern Nevada Health District	6	12.5	81	30.7				
39	39	81.3	174	65.9				
State of Nevada	48	100	264	100				

 $Source: Reported\ to\ Office\ of\ Public\ Health\ Informatics\ and\ Epidemiology\ from\ each\ Jurisdiction.$

Pneumonia and Influenza (P&I) Mortality Surveillance

The Pneumonia and Influenza (P&I) mortality percentage is all deaths, where Pneumonia or Influenza is listed as the underlying or contributing cause of death, divided by the total deaths in Nevada for each week. As of January 18th, there were 42 P&I deaths and 403 total deaths for week 52 in Nevada. The P&I mortality rate for Nevada is above the epidemic threshold at 10.4% (threshold 7.3%). Nationally, the P&I mortality is below the epidemic threshold at 7.0%.

Figure 7



Source: OVR: WEVRRS and CDC: FluView.

Technical Notes

- Data are subject to changes, additionally, there is a lag in reporting.
- Influenza surveillance procedures vary by jurisdiction.
- Influenza-like illness (ILI): a fever greater than or equal 100°F with cough and/or sore throat.
- Percent positive: The number of positive influenza laboratory tests divided by the total number of tests performed.
- Incidence rate is per 100,000 population as estimated by the state demographer.

This report contains information from national and state-level data sources. Influenza surveillance data is collected by a various systems, including:

- Influenza-like Illness Network (ILINet): a sentinel surveillance system in collaboration with the Centers for the Disease Control and Prevention (CDC) where outpatient providers report ILI information weekly.
- National Electronic Telecommunication System for Surveillance (NETSS): a system whereby data is transmits to CDC. Influenza data collected through NETSS does not provide influenza sub-typing information.
- National Electronic Disease Surveillance System (NEDSS): a system for collecting data and monitoring disease trends and outbreaks.
- NEDSS Based System (NBS): an implementation of the NEDSS standards. It provides a secure, accurate, and efficient means of
 collecting, transmitting, and analyzing public health data.

Citations

- 1. CDC. FluView: A Weekly Influenza Surveillance Report. http://www.cdc.gov/flu/weekly/pastreports.htm.
- 2. Nevada State Demographer's Office. 2003-2020 ASRHO Estimates and Projections. Division of Public and Behavioral Health edition. Vintage 2015.
- 3. OPHIE. DPBH. NBS. 2015-2016. Accessed December 2017.
- 4. Office of Vital Records (OVR). DPBH. Web Enabled Vital Records Registry System (WEVRRS) [unpublished data]. 2015-2016. Accessed January 2017.
- 5. Southern Nevada Health District (SNHD). NETSS/Trisano. 2015-2016. Accessed January 2017.

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